

GEOSS Common Infrastructure (GCI) Initial Operating Capability (IOC) Task Force Terms of Reference

Purpose

The GEOSS Common Infrastructure (GCI) Initial Operating Capability (IOC) Task Force (hereafter referenced as “IOCTF”) will support the Group on Earth Observation (GEO) in the coordination, implementation and sustainability of the GEOSS Common Infrastructure.

Objectives

The IOCTF is convened to report to the GEO Executive Committee in support of GEOSS:

- to define and recommend a Concept of Operations plan for the GCI components including aspects of operational requirements, responsibilities, and interaction,
- to evaluate the existing GCI components and their sustained operation in light of known and emerging provider and user requirements, reliability, suitability, sustainability, and quality of service, and
- to provide administrative recommendations regarding models of GCI operational solutions addressing sustainability, maintenance, enhancements, access control and security, and software licensing and ownership (intellectual property rights).

Approach and Functions

1. The IOCTF shall be composed of individuals recommended by the GEO Committees and the C4 chair, with administrative support provided by the GEO Secretariat. This will help encourage exchange of information between the Task Force, the Committees, and the GEO Tasks they support. ^[1]
2. Chairmanship or co-chairmanship of the IOCTF shall be decided by the Task Force in the initial meeting.
3. Tasking of specific research or investigations to sub-teams of individual experts will be made by the IOCTF to address identified issues at the appropriate level of detail and professional expertise.
4. Work will be conducted primarily using teleconference facilities and electronic mail, although occasional face-to-face meetings may be scheduled as needed– ideally to coincide with existing GEO activities.
5. Work milestones will be identified in the initial work sessions and tracked through delivery of reports and recommendations to the Executive Committee.
6. The IOCTF will provide status reports to the Executive Committee during their meetings as well as more detailed reporting in response to the task force objectives.
7. The period of performance of the IOCTF shall be one year, beginning 1 July 2008 and ending 30 June 2009. In the period immediately following the end of the performance period of the IOCTF and terminating at the GEO VI Plenary, the IOCTF will assist the

Executive Committee in reporting to the GEO VI Plenary on the outcome of the GCI IOC phase.

8. If a member of the IOCTF believes he has a potential conflict of interest (CoI), then it is his sole responsibility to bring this to the attention of the other members of the IOCTF. The other members of the IOCTF should then monitor this potential CoI.

Footnote:

[1] Regional representation may be addressed by:

(i) Co-opting particular individuals to the IOCTF;

and / or

(ii) Identifying particular experts from given regions to participate in the process.

GEOSS Common Infrastructure (GCI) Initial Operating Capability (IOC) Task Force Work Plan

Three deliverables are currently foreseen, although updates to the Work Plan may be made as the work of the IOCTF progresses.

1. Concept of Operations Plan

Building on the existing GEOSS Common Infrastructure (GCI) description and diagram as proposed in the *GEOSS Common Infrastructure Establishment Process* document [*website address to be inserted*], a high-level common operational view shall be developed. This will be prepared along with narrative descriptions of the participation of GEO service offerors, the general administrative workflow of the GCI, and interaction of end-users with GEOSS. This Concept of Operations Plan will help identify and demonstrate the logical interactions within the system-of-systems and their operational requirements or constraints. The documented perspective shall be from the enterprise perspective rather than the technical point of view and will complement the GEOSS Strategic Guidance document.

Proposed milestone: A draft document will be due by 21 September 2008.

2. Evaluation of GCI Components

The actual solutions offered for the GCI will be evaluated against the logical design of the Concept of Operations Plan, documentation from the Architecture Implementation Pilot Phase I, Interoperability Process Pilot Project (IP3) results, nominated component information systems and their services, and user requirements from Communities of Practice and Societal Benefit Areas (SBAs). Evaluation will be in terms of capabilities and functionality defined by actual requirements by offered components and services for GCI service performance, quality, availability, scalability, sustainability, and suitability. The documentation and review will be conducted with input from and collaboration with the ongoing AIP Phase II activity that will be also testing and documenting the GCI based on additional SBA support areas and offered components and services. The deliverable will be a structured synopsis of requirements for each offered GCI solution instance with reference to the activity/component(s) source of the requirement or capability. The audience will be the architects and implementers of the GCI systems, with an overview suitable for managerial understanding.

Proposed milestone: A draft document will be due in March 2009.

Deliverable 2A GCI consolidated requirement

Deliverable 2B GCI test and evaluation plan

3. Recommendations for Long-term GCI Operations

In the context of all GCI operational component services and capabilities, document the alternatives and options to provide the highest level of capability for access to GEOSS resources. Key logistical items to be addressed by the IOCTF may include:

- Long-term cost implications of voluntary, contributed, or contracted operations for each/all components,
- Accountability and responsibility for operations by service provider
- Presenting issues and alternatives for GCI service operations, maintenance (hardware/software and telecom), and extensibility
- Software ownership and intellectual property issues regarding long-term operations (Proprietary versus open source concerns)
- Operation and maintenance of single versus multiple GCI service instances (e.g. Web portals, Clearinghouses, and Registries)
- Access control and security policies on GCI services
- User interface policies in support of human and software clients, SBAs, communities of practice, and the general GEO community
- Process for incorporating user community requirements into GCI
- Other issues when and if appropriate

Deliverable will be a document with alternatives, discussion, and references to support understanding of potential budgetary and operational commitments by the GEO Executive Committee in long-term operations of the Common GEOSS Infrastructure.

Proposed milestone: A draft document will be due in April 2009.

List of acronyms